

What is claimed is:

1. A composition of matter comprising the structure



5 wherein:

 F¹ is a vehicle;

 X¹ and X² are each independently selected from -(L¹)_c-P¹-(L³)_d-P², -(L¹)_c-P¹-(L³)_d-P²-(L³)_e-P³, and -(L¹)_c-P¹-(L³)_d-P²-(L³)_e-P³-(L⁴)_f-P⁴

 P¹, P², P³, and P⁴ are each independently selected from SEQ ID NOS:

10 45 and 46;

 L¹, L², L³, and L⁴ are each independently linkers; and

 a and b are each independently 0 or 1, provided that at least one of a and b is 1;

15 c, d, e, and f are each independently 0 or 1, provided that if P¹ is SEQ ID NO: 45 and P² is SEQ ID NO: 46, then d is 1; and wherein said composition of matter does not comprise SEQ ID NO: 43.

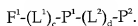
2. The composition of matter of Claim 1 of the formulae



20 or



3. The composition of matter of Claim 1 of the formula



4. The composition of matter of Claim 1 wherein F¹ is an Fc-region.

25 5. The composition of matter of Claim 1 wherein F¹ is an IgG Fc domain.

6. The composition of matter of Claim 1 wherein F¹ is an IgG1 Fc domain.

7. The polypeptide of Claim 1, wherein F¹ is a water-soluble polymer or a carbohydrate.

8. The protein of Claim 7, wherein the polymer is polyethylene glycol.

9. The protein of Claim 7, wherein the carbohydrate is dextran.
10. A polypeptide of Claim 1 capable of eliciting B cell growth, survival, or activation in mesenteric lymph nodes.
11. An isolated nucleic acid encoding a polypeptide of Claim 1.
- 5 12. The nucleic acid of Claim 11 including one or more codons preferred for Escherichia coli expression.
13. The nucleic acid of Claim 11 having a detectable label attached thereto.
14. An expression vector comprising the nucleic acid of Claim 11.
15. A host cell comprising the expression vector of Claim 14.
- 10 16. The host cell of Claim 15, wherein the cell is a prokaryotic cell.
17. The host cell of Claim 16, wherein the cell is Escherichia coli.
18. A pharmaceutical composition comprising a therapeutically effective amount of a protein of Claim 1 in a pharmaceutically acceptable carrier, adjuvant, solubilizer, stabilizer and/or anti-oxidant.
- 15 19. A method of modulating AGP-3-related activity in a mammal, which comprises administering a therapeutically effective amount of the composition of matter of Claim 1.
20. The method of Claim 22, wherein the AGP-3-related activity takes place in mesenteric lymph nodes.
- 20 21. A polypeptide comprising an antibody sequence in which one or more amino acids from antibody variable domains or CDR regions are replaced by sequences selected from SEQ ID NOS: 45 and 46.
22. The polypeptide of Claim 21, wherein a first CDR region is replaced by SEQ ID NO: 45 and a second CDR region is replaced by SEQ ID NO:
- 25 46.
23. The polypeptide of Claim 21, wherein all CDR regions are replaced by SEQ ID NO: 45.
24. An isolated nucleic acid encoding a polypeptide of Claim 21.
25. The nucleic acid of Claim 24 having a detectable label attached thereto.

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26. An expression vector comprising the nucleic acid of Claim 24.
27. A host cell comprising the expression vector of Claim 26.
28. A pharmaceutical composition comprising a therapeutically effective
amount of a polypeptide of Claim 21 in a pharmaceutically acceptable
5 carrier, adjuvant, solubilizer, stabilizer and/or anti-oxidant.
29. A method of modulating AGP-3-related activity in a mammal, which
comprises administering a therapeutically effective amount of the
composition of matter of Claim 21.
30. The method of Claim 29, wherein the AGP-3-related activity takes
10 place in mesenteric lymph nodes.